## INTERMOUNTAIN FOREST AND RANGE EXPERIMENT STATION

FOREST SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Ogdon, Utah

Control Insect V Payette

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Payetto National Forest Annual Aerial Survoy July - August 1957

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## RESULTS

Aroa A. Aroa A oxtonds from Gooso Lake north to the Salmon River. It is bordered on the east by the McCall-Burgderf read, and on the west by the Meadows-Hazard Lake read.

About 8,600 acros of light budworm damago woro found betwoon Brundago Roservoir and Uppor Hazard Lako. This infostation has been present for a number of years and is not considered particularly threatening. Only 30 or 40 trees affected by fir engraver north of Burgderf were noted. Pine bootle appeared endomic.

Area B. Area B is in the approximate shape of a triangle contering between Pilot Peak, Monumental Summit, and Krassel Ranger Station.

Modium to heavy budwerm damage was found in about 7,300 acres around Pilot Peak, especially to the north. Also north of Pilot Peak, 20 to 25 trees were infested with Douglas-fir bootle. In most cases the Douglas-fir trees appeared more yellow this year with the characteristic light red foliage being the exception rather than the rule.

The greatest concentrations of fir engravor bootles occurred in Quartz Greek, yet appeared to be at an endemic level. At most, the entire area contained no more than 100 damaged individual trees in small groups, which has been normal for some years. A few trees damaged by pine beetles were found in the vicinity of Rainbow Saddle.

Aroa C. The eliptical area C ranges between Quaking Aspen, Chicken Poak, Burnt Knob, and Haypress Meadows in Chamberlin Basin. About 4,000 acros below Sheepeater Mountain around Fish Lake and Flossy Lake showed medium to heavy damage of alpine fir by an unknown defeliator. Southeast of the Chamberlain Ranger Station an endomic condition of fir engravor damage was noted.

Area D. Area D comprises the entire forest south of New Meadows, borders along the Cascade Reservoir, encompasses the Weiser River and the Middle Fork of the Weiser River, and extends to the Mill Crook Guard Station. In the 1955 and 1956 aerial surveys, light to medium budwerm damage was noted half way up the slope on the west side of Cascade Reservoir. Much of the same situation was found this year. On the other side of the ridge to the west, between No Business Mountain and Burnt Wagen Basin, light to medium budwerm damage was found on the north side of the East Fork of the Weiser River below Redpoint. The damage here had not been proviously noticed, and it is quite possible the insect is migrating westward from the previously infested Cascade Reservoir area. This infestation covers about 21,800 acres.

Around and to the south of Indian Mountain, particularly Cougar Basin, 30 to 40 fir engraver damaged trees were found in widely separated small groups. Douglas-fir bootle damage has been occurring below the Middle Fork of the Weiser River, but appears to be subsiding in intensity. Approximately 40 to 50 trees were noted in groups ranging in size from 5 to 10 trees. One particularly large group of 15 to 20 trees was found northwest of Council Mountain.

Area E. This area covers a good part of the Seven Devils Country where the Payette Ferest borders the Nez Perce Ferest and south as far as Lest Valley Reserveir, and includes a large portion of Cuprum and Hells Canyon. Area E, in general, shows a large amount of fermer Douglas-fir bootle damaged timber. The number of newly infested trees is not as high as one might expect in an area which showed so much previous Douglas-fir beetle activity. At best 60 to 70 individuals were spetted and these occurred in small groups of 3 to 5 trees with an occasional larger group of 10 to 15 trees. The greatest damage was found northwest of Lost Valley Reserveir in the Lick Creek Area, and some damage was noted in Hells Canyon to the east of Big Bar around Lockwood Saddle.

Budworm damage was found in several widely scattered sections over the area, some of it adjacent to boundaries of previous infestations. Light to medium damage was noted southwest of Smith Mountain. Light to medium damage was found on both sides of the ridges that connect Sheep Rock Peak, White Mountain Peak, and Pyramid Peak. Budworm damage was found ranging from light to heavy in the Rapid River drainage and the country north of Lost Valley Reservoir. Rapid River was by far the most seriously infested. All tolled, about 27,500 acres are infested. However, along the ridges in about 7,000 acres of this area damage is occurring to the alpine fir by an unknown defoliator.

Area F. Area F extends from the Hornet Ranger Station in a general southwesterly direction to the Mann Creek Guard Station. Light to medium budworm damage mixed with the unknown defoliator on alpine fir occurred in about 11,000 acres south of Hornet Ranger Station in the general area of Johnson Creek Park. Light damage in 2,200 acres was noted west of Crooked River Point, and about 4,000 acres of medium damage in Hornet Creek.

A total of 55 to 60 individual trees were found to be infested with Douglas-fir beetle. The trees attacked occurred in small groups of 10 to 15 individuals. One rather large group was spotted north of Mann Creek Guard Station. A few beetle-damaged pine trees were also noted in the same general area.

## SUMMARY

In general, the areas of budworm infestations on the Payette National Forest are of either new origins or have been static for several years. The heaviest concentration was found around Pilot Peak and has increased in intensity since 1955.

Douglas-fir barkbeetle loss has decreased considerably during the past year. Other bark beetle losses remain at an endemic level throughout the forest.

Anunknown defoliator on alpine fir is causing rather heavy damage to these stands in the higher ridges.

Table 1. Acreage and degree of severity of insect damage on the Payette

National Forest

Area	Defoliator	Acreage of defoliation			
		Light	Medium	Heavy	Total
A	Budworm	8,600			8,600
В	Budworm	w	7,300	~ ~	7,300
C	Unknown defoliator-A.F.		4,000		4,000
D	Budworm	9,800	12,000		21,800
E	Budworm	4,000	21,300	2,200	27,500
	Unknown defoliator-A.F.		7,000		7,000
F	Budworm	2,200	4,000		6,200
	Unknown defoliator-A.F.	= ~	7,000		7,000
	Total budworm	24,600	44,600	2,200	71,400
	Total unknown		18,000		18,000

